

Psychology in Catalonia: 1996–2002*

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Abstract

This article summarises the *Report de la Recerca en Psicologia a Catalunya* (Report on Psychology Research in Catalonia) for the period 1996–2002, to be published in 2005 by the Institut d'Estudis Catalans.

A range of information, gathered from university institutions, the Catalan government (via the DURSI – Ministry of Universities, Research and the Information Society) and research group coordinators, identified previously through the development of an ad hoc questionnaire, was used to draw up a map of psychology research in Catalonia for the period indicated. The map includes researchers from the six Catalan universities that offer psychology degrees (or, in the case of the Universitat de Lleida, educational psychology) and was organised according to knowledge area and university.

The information gathered refers to various key issues concerning the research groups: research projects established with the backing of various funding bodies, output as measured by the publication of scientific articles, funding obtained from government bodies and private organisations, research infrastructure available, the status of the various groups and, finally, the conditions, evaluations, expectations and resource management of the research groups themselves.

Resum

En aquest article es presenta el resum del Report de la Recerca en Psicologia a Catalunya durant el període 1996–2002, publicat l'any 2004 per l'Institut d'Estudis Catalans.

A partir de informacions diverses, procedents especialment d'institucions educatives de nivell universitari, Administració de Catalunya (Departament d'Universitats, Recerca i Societat de la Informació, DURSI), i els propis coordinadors de Grups de Recerca –prèviament detectats mitjançant la elaboració d'un qüestionari *ad hoc*–, s'ha perfilat un mapa de la recerca en Psicologia a Catalunya durant el període estudiat, el qual inclou investigadors procedents de les sis Universitats catalanes en les quals s'imparteixen estudis de Psicologia (o, en el cas de la Universitat de Lleida, de Psicopedagogia). Els eixos organitzadors de la informació han estat les Àrees de Coneixement i les Universitats.

La informació recollida s'ha articulat al voltant de diverses qüestions cabdals relatives als Grups de Recerca: Projectes de recerca obtinguts per part de diversos organismes subvencionants, la productivitat contemplada des de la vessant de la publicació d'articles científics, el finançament obtingut per part de diverses Administracions i entitats privades, la infraestructura amb la que compten, les característiques d'arranjament d'aquests Grups, i, finalment, les condicions, valoracions, expectatives i gestió dels recursos dels Grups de Recerca.

Detailed summary

This report presents a map of psychology research in Catalonia for the period 1996–2002. A more detailed version of the *report* in Catalan has been published by the Institut d'Estudis Catalans [1].

There is a previous report covering the period 1990–1995 (see reference [2]). Developing a research map is a rather

complex task, one that requires deciding in advance which thematic aspects will be regarded as fundamental. We chose to look at research groups, projects, scientific output, the resources that are lacking, and infrastructure. In addition, an overall view of how research is organised is provided.

These thematic aspects provide a reference point from which to examine any field or area of psychology. Naturally, we are referring here to scientific psychology, which from an academic perspective has, for the last twenty years or so, been organised according to knowledge areas. This decision, which in being reached had both supporters and opponents, is a criterion that already forms part of academic teaching practice. We acknowledge that this is less so in the case of research, as many studies cut across different

* An extended version of this report is available in Catalan on request: piec@iecat.net [*Reports de la recerca a Catalunya: Psicologia*, Barcelona, Institut d'Estudis Catalans, 2005]

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areas (although this does not necessarily imply interdisciplinarity); however, it is nevertheless the case that each research group coordinator is affiliated with a given knowledge area, regardless of whether the other group members come from different areas. The present report thus considers knowledge area to be the first criterion for organising research information, and regards the activities of researchers as contributions linked to their respective R+D groups. All the research groups belonging to the different knowledge areas are described and analysed from various points of view in order to illustrate their potential. This approach emphasises the extent to which this research potential was realised through the work carried out during the period studied.

Having made this initial differentiation, a second criterion for organising the information was the centres associated with the research carried out. To a large extent, the authors of research studies work within the framework of Catalonia's universities [basically, the Universitat Autònoma de Barcelona, the Universitat de Barcelona, the Universitat de Girona, the Universitat de Lleida, the Universitat Ramon Llull and the Universitat Rovira i Virgili (Tarragona)], as the other universities do not offer psychology degrees. (the Universitat de Lleida offers a second-cycle course in educational psychology). A small number of other institutions also provide a suitable framework for psychology research.

In broad terms, the method used consisted of identifying those groups that carry out research. This proved to be far from easy as, in the first place, it meant defining what we understood to be a research group. Furthermore, our aim was to determine, within the six knowledge areas of psychology, which groups had carried out and developed their research activities during the period 1996–2002.

Our definition of research group was a group of people, linked to a knowledge area of psychology, led by a coordinator and which, during the period studied, received research funding, regardless of who the funding body was.

In order to identify research groups, we began by considering the list of research group coordinators maintained by the Research Observatory of Catalonia. These people were then each sent a questionnaire, developed ad hoc. A detailed analysis of the responses enabled us to modify the initial list, having obtained information about the existence of other groups.

Further refining the list of research groups proved far from easy as, when considering the information as a whole, we found there to be a lack of criteria for organising it; neither were common criteria used by the various Catalan universities, nor even by different departments of the same university or by the same department for different years. In addition, there were gaps in the information which we have tried to fill through other laborious and detailed searches. We would also like to point out that there was at times a significant lack of consistency in the information (name, group members, output, resources, etc.), even with respect to a group's existence;

this raises questions about the reliability of the information obtained from each of the sources.

There were several successive stages to the process of obtaining information about research. Firstly, the above-mentioned questionnaire, consisting of two clearly distinct parts, was designed. The aim of the first part was to obtain objective and detailed information about all the criteria considered relevant to the basic thematic aspects used to demarcate the research map. The second part of the questionnaire, entitled *Conditions Affecting the Functioning of Research Groups*, comprised ten questions directed at the heads of the respective groups.

In order to ensure an adequate number of responses to the questionnaires, a large mailing was sent out in October and November 2003 to all the research group coordinators identified via the Research Observatory list, as well as to the heads of all the psychology departments of the six Catalan universities offering psychology degrees: the Universitat Autònoma de Barcelona, the Universitat de Barcelona, the Universitat de Girona, the Universitat de Lleida, the Universitat Ramon Llull and the Universitat Rovira i Virgili (Tarragona). By sending the mailing out to department heads, we hoped to identify other existing research groups not featured in the list. The stage of collecting information via the questionnaires lasted until February 2004. There remain, however, gaps in the information, and it has proven to be impossible to obtain all the information requested from some research groups.

The source of the information is indicated for all aspects analysed. Our initial objective of comparing all the data has been met wherever possible, although this turned out to be an unrealistic aim on several occasions as the information provided by the group coordinator did not coincide with that featured in the Research Observatory list or in department reports. The discrepancies vary widely in their nature, but particularly concern the amount of funding awarded, the existence of different funded projects, the name of the group and the composition of the research groups.

Seventy-five research groups were identified, each of which was characterised by all or some of its members having participated, during the period 1996–2002, in some kind of funded research activity in one of more of the six knowledge areas of psychology. By knowledge area, the groups were distributed as follows: methodology of the behavioural sciences, 6; personality, assessment and psychological treatments, 14; psychobiology, 8; basic psychology, 15; developmental and educational psychology, 25; and social psychology, 7. Their distribution by university was: Universitat Autònoma de Barcelona, 24; Universitat de Barcelona, 28; Universitat de Girona, 5; Universitat de Lleida, 4; Universitat Ramon Llull, 8; and the Universitat Rovira i Virgili (Tarragona), 6.

By taking into account researchers, with or without PhDs, but excluding research fellows, collaborators and support technicians, the 75 research groups comprised a total of 823 researchers.

Table 1. Number of researchers per knowledge area and university. *Abbreviations:* MCC Methodology for the behavioural sciences, PATP personality, assessment & therapy, PB psychobiology, PBA general psychology, PEE developmental & educational psychology, PS Social Psychology, UAB Universitat Autònoma de Barcelona, UB Universitat de Barcelona, UdG Universitat de Girona, UdL Universitat de Lleida, URL Universitat Ramon Llull, URV Universitat Rovira i Virgili (Tarragona)

| Area/ university | UAB | UB | UdG | UdL | URL | URV | Σ |
|---------------------|-----|-----|-----|-----|-----|-----|-----|
| MCC | 5 | 47 | 0 | 0 | 0 | 7 | 59 |
| PATP | 34 | 37 | 0 | 8 | 45 | 11 | 135 |
| PB | 27 | 61 | 0 | 0 | 8 | 3 | 99 |
| PBA | 87 | 78 | 7 | 0 | 0 | 10 | 182 |
| PEE | 108 | 86 | 28 | 18 | 30 | 11 | 281 |
| PS | 14 | 34 | 10 | 0 | 13 | 0 | 71 |
| No researchers | 275 | 343 | 45 | 26 | 96 | 42 | 823 |

The profile of the groups was quite varied, regardless of the criterion applied. They had been active for between 1 and 23 years, clearly illustrating the great diversity in terms of their scope. During the period studied (1996–2002), thirty new research groups were created alongside already existing ones, indicating that psychology research in Catalonia is undergoing a period of growth and development. This is a noteworthy finding, alongside the fact that 37% of groups have ten years or more of continuous research activity behind them.

The sizes of the groups also varied, ranging from 1 to 27 researchers. Small groups were the most frequent (3–8 members, accounting for 41% of the groups as a whole). Considering this figure in the present European research climate, one characterised by notable competitiveness and in which groups are constantly being required to increase research output, this concentration of research into small groups does not favour its development.

In terms of the composition of the groups, the most common format (62%) was a group comprising researchers and research fellows. A negative finding worth noting concerns the low numbers of support technicians, who are strongly in demand.

Responses to the questions concerning *Conditions Affecting the Functioning of Research Groups* revealed that most groups spent an average of 13 hours per week teaching. Other findings include the positive evaluations received by both experienced and new researchers, the adequate recognition of the scientific authorship of new researchers, and the positive view of the group’s immediate future and research policy. However, the support and funding received by groups from their respective universities were regarded negatively. The most important priority areas identified as needing to be addressed were financial resources, the hiring of research fellows and a reduction in teaching hours.

The heads of research groups were asked to indicate their lines of research followed during the period 1996–2002. We did not consider it necessary to define the concept of *line of research* in the questionnaire, although implicitly it is defined as a series of studies developed in a similar direction or ad-

ressing the same issue, leading to the carrying out of projects with related topics and to homogeneous scientific activity, all of which enables a more incisive, in-depth approach to the development of knowledge. However, responses to the questionnaire suggested that the concept was not understood in the same way by all the groups. Moreover, there seemed to be an inverse relationship between the length of time the group had been in existence and the number of lines of research being pursued: whereas a good number of groups with more than fifteen years of activity concentrated on a few lines of research, the number increased dramatically in new universities or groups. This rapid growth will probably reach a ceiling and level off over the coming years.

Table 2. Number of funded projects with respect to the different sources of funding for each university. For abbreviations, see Table 1

| | UAB | UB | UdG | UdL | URL | URV | Total |
|--------------------|-----|-----|-----|-----|-----|-----|-------|
| International | 4 | 15 | 12 | 2 | 2 | 0 | 87 |
| Spanish government | 50 | 70 | 7 | 7 | 1 | 15 | 154 |
| Catalan government | 11 | 41 | 9 | 3 | 15 | 1 | 46 |
| Universities | 1 | 4 | 4 | 7 | 19 | 0 | 29 |
| City councils | 6 | 5 | 7 | 9 | 1 | 0 | 44 |
| Private | 15 | 22 | 7 | 1 | 6 | 4 | 23 |
| Total | 87 | 157 | 46 | 29 | 44 | 20 | 383 |

Table 3. Percentages of funding received from various funding sources for each university. For abbreviations, see Table 1

| | UAB | UB | UdG | UdL | URL | URV |
|--------------------|------|------|------|------|------|------|
| International | 21 % | 21 % | 18 % | 28 % | – | – |
| Spanish government | 60 % | 44 % | 26 % | 21 % | – | 78 % |
| Catalan government | 7 % | 15 % | 20 % | 8 % | 23 % | 9 % |
| Universities | 1 % | – | 5 % | 10 % | 27 % | – |
| City councils | – | – | 22 % | 19 % | – | – |
| Private | 11 % | 20 % | 9 % | 14 % | 50 % | 13 % |

Obtaining funding for projects during the period studied was the basic criterion for forming a research group and, in turn, was the usual means through which the group acquired research resources. We initially drew up a list of funding bodies, including 27 classifications, but this was subsequently reclassified into the following project categories: international, Spanish central government, Autonomous Government of Catalonia, universities, city councils, and private. The total number of funded projects was 377, distributed as follows: international, 87; Spanish central government, 151; Autonomous Government of Catalonia, 46; Catalan universities, 29; city councils, 44; and private, 20. The large number of international projects and the relatively few projects funded by the Autonomous Government of Catalonia, compared with those financed by the Spanish central government, should be noted.

Table 4. Output of research groups according to knowledge area. Abbreviations: ArtN National (Spanish) article, ArtI international article, LN national book, CLN chapter of national book, LI international book, CLI chapter of international book. For other abbreviations, see Table 1

| Area | ArtN | ArtI | LN | CLN | LI | CLI | Theses | Total publications (n) | Current impact factor |
|---------------|------|------|-----|-----|----|-----|--------|------------------------|-----------------------|
| Total MCC | 94 | 82 | 44 | 65 | 3 | 13 | 40 | 300 | 100.00 |
| Total PATP | 220 | 179 | 53 | 133 | 8 | 37 | 90 | 630 | 69.23 |
| Total PB | 108 | 209 | 23 | 45 | 3 | 10 | 18 | 398 | 100.00 |
| Total PBA | 228 | 151 | 33 | 203 | 2 | 76 | 65 | 695 | 29.41 |
| Total PEE | 531 | 86 | 168 | 319 | 21 | 47 | 130 | 1164 | 51.85 |
| Total PS | 119 | 55 | 33 | 96 | 2 | 17 | 40 | 326 | 42.86 |
| Overall total | 1300 | 762 | 354 | 861 | 39 | 200 | 383 | 3513 | |

Table 5. Output of research groups according to university. For abbreviations, see Tables 1 and 4

| Univ. | ArtN | ArtI | LN | CLN | LI | CLI | Thesis | Total publications (n) | Current impact factor |
|---------------|------|------|-----|-----|----|-----|--------|------------------------|-----------------------|
| Total UAB | 452 | 139 | 127 | 342 | 16 | 33 | 133 | 1104 | 56.52 |
| Total UB | 461 | 417 | 129 | 325 | 17 | 129 | 157 | 1480 | 70.97 |
| Total UdG | 131 | 28 | 61 | 52 | 0 | 1 | 9 | 273 | 20.00 |
| Total UdL | 69 | 33 | 14 | 46 | 0 | 9 | 19 | 171 | 50.00 |
| Total URL | 92 | 41 | 17 | 50 | 5 | 19 | 26 | 224 | 50.00 |
| Total URV | 95 | 104 | 6 | 46 | 1 | 9 | 39 | 261 | 40.00 |
| Overall total | 1300 | 762 | 354 | 861 | 39 | 200 | 383 | 3513 | |

Table 6. Doctoral theses submitted to Catalan universities for the periods 1990–1995 and 1996–2002. For abbreviations, see Table 1

| Universities | Theses 1990-1995 | % | Theses 1996-2002 | % |
|--------------|---------------------|------|---------------------|------|
| UB | 172 | 55.3 | 122 | 55.5 |
| UAB | 122 | 39.2 | 71 | 32.3 |
| UdG | 4 | 1.3 | 12 | 5.5 |
| UdL | 3 | 1 | | 0.0 |
| URL | 4 | 1.3 | | 0.0 |
| URV | 6 | 1.9 | 15 | 6.8 |
| Total | 311 | | 220 | |

The output of the research groups varied greatly. In the present research climate it is particularly important to demonstrate scientific output by publishing articles in journals with an impact factor; however, this challenge is being met only to a limited extent as –at the time of this writing– there is still no Catalan university where all the research groups have had papers published in such journals (although this has been achieved by cutting across knowledge areas).

With respect to doctoral theses, the number of *viva voces* in the period 1996–2002 was 220, a considerable drop from the figure of 311 for the previous six-year period (1990–1995).

Taken as a whole, the projects awarded funding received a total of €6,275,504 from the above-mentioned sources. In line with the general approach of our study, and in terms of both the overall perspective and the project category, the

awarding of funding was analysed according to knowledge area and by university. Considering the knowledge areas as a whole, there was no regular pattern in terms of which university received the most funds, this depending more on the area in question. The responses of the group coordinators showed that, with regard to how these resources were used, priority was given to the hiring of research collaborators and the purchasing of computer equipment. The respective amounts illustrate the distribution.

Although little information was obtained about infrastructure, the available data show that there was a slight increase, especially in terms of the acquisition of computer and audio/video equipment.

For all the research indicators considered (resources, number of years of group activity, size, output, etc.) data were provided in absolute terms. Although it may have been useful to work with relative data for each individual university, thus giving some idea of the importance of each research group within its own setting, we recognise that the concerns of the present report go beyond the borders of individual universities, the overall picture being of greater interest.

Although the six universities offering psychology degrees vary greatly in terms of their context and history, as well as with regard to the factors that bear on them as institutions, we were nonetheless able to draw general conclusions about the strengths and weaknesses of psychology research in Catalonia.

One weakness concerns the lack of consolidation between recently created groups. Given their current structure, it remains uncertain whether Catalan psychology re-

Table 7. Amount of funding received according to knowledge area. For abbreviations, see Table 1

| Area | Overall amount | No. of groups | Amount per group | No of projects | Amount per project |
|------|----------------|---------------|------------------|----------------|--------------------|
| MCC | 291,193 | 6 | 48,532.16 | 27 | 10,784.92 |
| PATP | 973,584 | 14 | 69,541.71 | 52 | 18,722.77 |
| PB | 1,106,211 | 8 | 138,276.37 | 71 | 15,580.44 |
| PBA | 1,395,837 | 15 | 93,055.00 | 45 | 31,018.60 |
| PEE | 1,949,248 | 25 | 77,969.92 | 125 | 15,593.98 |
| PS | 559,431 | 7 | 79,918.71 | 57 | 9,814.58 |

Table 8. Amount of funding received per university. For abbreviations, see Table 1

| University | Overall amount | No. of groups | Amount for each group | No of projects | Amount for each project |
|------------|----------------|---------------|-----------------------|----------------|-------------------------|
| UAB | 1,966,034 | 24 | 81,918.08 | 87 | 22,598.09 |
| UB | 2,953,478 | 28 | 105,481.35 | 153 | 19,303.77 |
| UdG | 623,197 | 5 | 124,439.40 | 46 | 13,547.76 |
| UdL | 323,291 | 4 | 80,822.75 | 29 | 11,147.96 |
| URL | 131,311 | 8 | 16,413.87 | 44 | 2,984.34 |
| URV | 278,193 | 6 | 46,365.50 | 20 | 13,909.65 |

search groups will be able to make a strong contribution to a future in which output and competitiveness will be key indicators of success, especially in the European context. The small size of the research groups analysed in our study hinders their ability to be competitive in Europe, where larger groups consist of a rich network of professional researchers whose training, initiative and dedication to the work, and not their country or university of origin, is of primary importance. In Catalonia, however, there are currently very few long-term inter-university research collaborations , and far too few working partnerships with research institutions from abroad. A further weakness concerns administrative and material support: At the time of our survey, many requests had yet to be met by government, whether involving management and administrative issues related to the intended research, or the need for specific infrastructural improvements, for example, renewing technical equipment, or the necessity to hire support personnel (laboratory technicians, etc.) and trainees (research fellows, etc.). Finally, responses to requests for new research projects were also lacking.

However, these weaknesses should not be allowed to detract from the strengths of psychology research in Catalonia. There was a clear increase in the number of research groups, implying a long-term commitment to strengthening and diversifying research. The number of projects carried out was significantly improved compared with previous years, especially when one considers the international projects, proof that psychology research in Catalonia is making its mark overseas, in both Europe and the USA. In addition, the number of papers published in impact journals gives cause for hope. Although the average impact

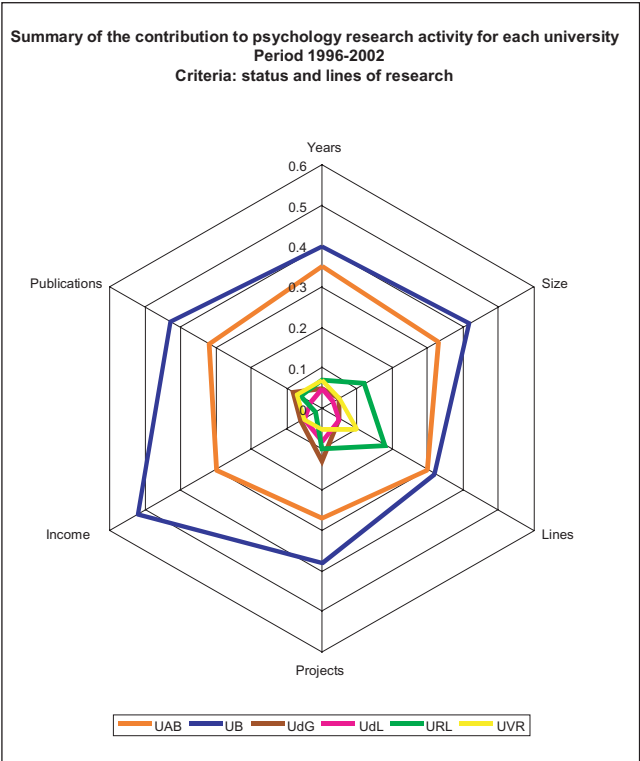


Figure 1. Overall view of the status of the research groups. *UAB* Universitat Autònoma de Barcelona, *UB* Universitat de Barcelona, *UdG* Universitat de Girona, *UdL* Universitat de Lleida, *URL* Universitat Ramon Llull, *URV* Universitat Rovira i Virgili (Tarragona)

factor was only 1.45 for articles published in journals on the ISI list, we regard this figure as encouraging. These quality indicators place psychology research, in contrast to other areas of research, in Catalonia in a relatively optimistic position.

On the basis of our findings, we would like to make three simple, yet important, suggestions, which we believe research groups need to consider in the future: (1) a clear desire to carry out research; (2) unquestionable dedication to the task; and (3) the ability to convince government and other funding bodies that proposed research projects are indeed relevant with respect to the current state of affairs in a given field, that they are feasible in terms of the human resources, infrastructure, materials and time available, and that they are capable of leading to scientific output.

To these suggestions we would like to recommend, as a final point and from a broader point of view, that the map of psychology research in Catalonia be developed beyond its current state, which is characterised by a lack of organisation and the predominance of isolated groups. The map of the future must be better drawn and integrated. If necessary, the number of lines of research should be reduced in some areas so that those remaining are strengthened and consolidated, thus fostering the shared responsibility of developing scientific knowledge in psychology. Likewise, research groups should be enriched with members from other centres and countries, thereby enabling new contributions to be made and ensuring that the shared task of research has the required social impact.

Acknowledgements

We would like to thank the *Institut d'Estudis Catalans* for providing access to the data bank of the DURSI, and the vice-chancellor's offices for research in all the Catalan universities offering psychology degrees, institutions to whom we are very grateful. We would like to thank Llorenç Arguimbau, documents manager at the IEC, and all the research group coordinators.

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